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PTO/SB/05 (03-01)

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Approved for use through 10/31/2002, OMB 0651-0032  
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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. YOR920030612US (8728-669)

First Inventor Xiaowei Shen

Title Cache Residence Prediction

Express Mail Label No. EV 413370685US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 30]  
*(preferred arrangement set forth below)*
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings *(if filed)*
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C. 113) [ Total Sheets 7 ]
5. Oath or Declaration [ Total Pages 3 ]
  - a.  Newly executed (original or copy)
  - Copy from a prior application (37 CFR 1.63 (d))
  - b.  *(for continuation/divisional with Box 18 completed)*
    - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  paper
  - c.  Statements verifying identity of above copies

22141 U.S.PTO  
10/79999**ACCOMPANYING APPLICATION PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 CFR 3.73(b) Statement  Power of Attorney *(when there is an assignee)*
11.  English Translation Document *(if applicable)*
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15.  Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other: Associate Power of Attorney

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation     Divisional     Continuation-in-part (CIP)    of prior application No.: \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

<input type="checkbox"/> Customer Number or Bar Code Label	<i>(Insert Customer No. or Attach bar code label here)</i>		or	<input type="checkbox"/> Correspondence address below
Name	Frank Chau, Esq.			
Address	F. CHAU & ASSOCIATES, LLC 1900 Hempstead Turnpike			
City	East Meadow	State	New York	Zip Code
Country	USA	Telephone	516-357-0091	Fax

Name (Print/Type)	Koon Hon Wong	Registration No. (Attorney/Agent)	48,459
Signature			Date 2-17-04

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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# FEE TRANSMITTAL

## for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,140.00)

## Complete if Known

Application Number	
Filing Date	February 17, 2004
First Named Inventor	Xiaowei Shen
Examiner Name	
Art Unit	
Attorney Docket No.	YOR920030612US1 (8728-669)

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None
 Deposit Account:

Deposit Account Number	50-0510
Deposit Account Name	IBM - YORKTOWN HEIGHTS

The Director is authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	770.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$)			

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
• Total Claims	24	-20** = 4	X 18 = 72
Independent Claims	6	-3** = 3	X 86 = 258
Multiple Dependent			290 = 0

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$)		330.00

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40.00
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

(Complete if applicable)

SUBMITTED BY	Name (Print/Type)	Koon Hon Wong	Registration No. (Attorney/Agent)	48,459	Telephone	516-357-0091
Signature		<i>Koon Hon Wong</i>	Date		2-17-04	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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ATTORNEY DOCKET NO. YOR920030612US1 (8728-669)  
Date: February 17, 2004  
Express Mail Label: EV 413370685US  
Date of Deposit: February 17, 2004

Sir

Transmitted herewith for filing is the Patent Application of:

Inventors: XIAOWEI SHEN, JAEHYUK HUH, BALARAM SINHAROY

For: CACHE RESIDENCE PREDICTION

Enclosed are: [X] 23 sheets of specification; [X] 1 sheet(s) of Abstract; [X] 6 sheet(s) of claims; [X] 7 sheet(s) of drawing(s);

- [X] An assignment of the invention to: International Business Machines Corporation, Armonk, New York,  
with Recordation Form.
- [X] Declaration and Power of Attorney.
- [ ] A certified copy of a \_\_\_\_\_ Application No. dated \_\_\_\_\_ from which priority under Title 35 USC §119 is claimed.
- [X] Associate Power of Attorney.

The filing fee has been calculated as shown below:

	(Col. 1)	(Col. 2)
FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	24 -20 =	4
INDEP CLAIMS	6 -3 =	3
MULTIPLE DEPENDENT CLAIMS PRESENTED		

If the difference in Col. 1 is less than zero, enter "0" in Col. 2.

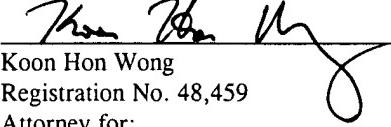
OTHER THAN A  
SMALL ENTITY

RATE	FEE
	\$ 770.00
X \$18 =	\$ 72.00
X \$86 =	\$ 258.00
+ 290 =	
TOTAL	\$ 1,100.00

- [ ] Checks in the amount of \$ \_\_\_\_ and \$ \_\_\_\_ to cover the filing fee(s) and recording fee are enclosed.
- [X] Please charge my Deposit Account No. 50-0510/IBM (Yorktown Heights) in the amount of \$1,100.00
- [X] The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0510/IBM (Yorktown Heights). A duplicate copy of this sheet is enclosed.
- [X] Any additional filing fees required under 37 CFR 1.16.
- [X] Any patent application processing fees under 35 CFR 1.17.

Respectfully submitted,

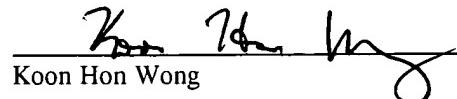
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CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this Application transmittal and the documents referred to as enclosed are being deposited with the United States Postal Service on this date February 17, 2004 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV413370685US addressed to: Commissioner for Patents, Mail Stop Patent Application, PO Box 1450, Alexandria, VA 22313-1450.

  
Koon Hon Wong